

**United States Environmental Protection Agency
Region V
POLLUTION REPORT**

*Entered
By*

Date: Saturday, May 30, 2009

From: Steven Faryan/Walter Nied, On-Scene Coordinator

Subject: Initial

Mallard North Landfill

Section 7 T. 40 North, Range 10 East, DuPage County, IL

Latitude: 41.9694

Longitude: -88.1425

EPA Region 5 Records Ctr.



346903

POLREP No.:	1	Site #:	B5QQ
Reporting Period:		D.O. #:	
Start Date:	5/20/2009	Response Authority:	CERCLA/OPA
Mob Date:	5/20/2009	Response Type:	Time-Critical
Completion Date:		NPL Status:	Non NPL
CERCLIS ID #:		Incident Category:	Removal Action
RCRIS ID #:		Contract #	
FPN#		Reimbursable Account #	

Site Description

The 30-acre Mallard North Landfill (MNL) is located on land currently owned by Forest Preserve District of DuPage County, Illinois. The MNL is currently fenced on the north and portions of the west. On the north side a concrete wall along the northern boundary extends below-ground separating the landfill and residential area. A residential housing development is present on the west side. The West Branch of DuPage River (WBDR) bonds the landfill on the east and south side. The Mallard Lake Landfill is located south of the MNL and on the opposite side of the WBDR. A biking and hiking trail is located east and south of MNL. E&E Hauling and Company owned and operated the Mallard North Landfill from 1966 until closure in 1974. Local municipal waste consisting of wood, paper products, plastics, rubber, cloth, glass, and metal have been reported to have been disposed in the landfill. The average cover thickness was estimated by EMCON to be 3.5 feet to 4 feet based on the comparison of topographic contours measured just after closure and in 1995. The MNL site does not have liners, active leachate collection system, or an active gas collection system. Several shallow and deep passive vents were installed previously at the MNL site. Few of the passive vents were equipped with flare. Currently none of the passive vent flares are operational. FPD is pumping approximately 10,000 gallons of leachate every week from a well (EW-L2) located in southeast corner of the site. The leachate is transported as a special waste to City of Wheaton wastewater treatment plant for disposal. The MNL site is currently under the Site Remediation Program (SRP) with the State of Illinois. Currently the landfill does not have any monitoring program in place.

Current Activities

Landfill gas was detected in the southeast corner of the MNL and northeast corner of the MLL (Note: this area is referred to as ML-6 area). The landfill gas was also detected offsite only few feet away from the Green Brook School building. The landfill gas could be either from MNL, MLL or both MNL and MLL. Some of the existing monitoring points (approximately 27

monitoring probes) on MNL were retrofitted to check for methane. Investigation of limited number of retrofitted probes at the MNL landfill showed presence of methane. Three leachate seeps discharging into WBDR were observed on the southeast portion of the MNL. Dead vegetation was also observed in the seep area. Currently FPD is removing 3-4 truck loads (4,500 gallons per truck) of leachate everyday from a leachate well located in the southeast portion of the landfill. The leachate is transported as a special waste to City of Wheaton wastewater treatment plant for disposal. The samples from leachate were collected and were submitted for analysis of VOCs, SVOCs, RCRA metals and ammonia. Total NH₄ detected in seep sample was 84.3 ppm at 6.73 pH and 17.8 °C. Methane has also been detected in leachate well that is being pumped. A shallow passive vent (SV12) in the southeast portion of the landfill near the leachate well was also monitored and showed presence of approximately 63 percent methane.

Methane detectors and screening of the homes were offered to homes on the north and west side of the MNL. The homes were screened and methane detectors were installed in the homes that accepted the offer.

A work plan to investigate has been prepared and submitted for regulatory agency review.

Large Diameter well 13 was installed 200 feet south of Green Brook School and a thermal oxidizer was installed that removes and burns the methane with a LP back up source. This unit runs 24 hours per day until methane levels are reduced to clean up standards.

Planned Removal Actions

Screen homes and install meters when requested by homeowners

Review and approve the work plan.

Review results of the leachate seeps.

Continue to extract and haul leachate. Increase quantity of leachate removed.

Monitor the effect of leachate pumping on leachate seeps.

Start investigation on the landfill to identify the potential source of offsite methane.

Periodically monitor retrofitted and newly installed monitoring probes for methane.

Install interim measures to remove landfill gas to stop the migration of landfill gas off-site.

Perform feasibility study and install active gas collection and treatment system.

Next Steps

Begin Site Investigation (May 20, 2009)

Continue to run LD-13 and extract landfill gas

Continuously pump leachate to stop the leachate seeps and releases on the South and East perimeter of the landfill.

Evaluate and install a permanent submersible pump to keep leachate elevations below the leachate seeps.

Evaluate and control the leachate seeps on the East perimeter of the landfill from the improperly sealed monitoring well and pond that is releasing liquid to the DuPage River.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				

Intramural Costs				
Total Site Costs	\$0.00	\$0.00	\$0.00	0.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

epaosc.net/MallardNorth